OIPE JC184
OCT 3 1 2003
PATENT & TRADEMARK OFFICE

PTO/SB/08A (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

	Complete if Known
Application No.	10/621,872
Filing Date	July 16, 2003
First Named Inventor	Ming-Hsuan Yang
Art Unit	2621
Examiner Name	Unknown
Attorney Docket Number	23085-07128

Sheet 1 of 4

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document No. Number – Kind Code[2] (if known)	Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
KH	A	US 6,112,195	8-29-2000	Burges
	B	US RE. 36,041	1-12-1999	Turk, et al.
KH	C	US 5,710,833	1-20-1998	Moghaddam, et al.
KH	D	US 5,164,992	11-17-1992	Turk, et al.

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3] – Number[4] Kind Code[5] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	T[6]
KH	E	WO 03/049033 A1	6-12-2003	Honda Giken Kogyo Kabushiki Kaisha	

OTHER REFERENCES – NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T[6]
KH	F	ADINI, YAEL et al., "*Face Recognition: The Problem of Compensating for Changes in Illumination Direction*," IEEE Transactions on Pattern Analysis and Machine Intelligence (July 1997), Vol. 19, No. 7, pp. 721-732.	
KH	G	BARTLETT, MARIAN STEWART, "*Face Image Analysis by Unsupervised Learning and Redundancy Reduction*," Doctorial Dissertation at University of California at San Diego (1998).	
KH	H	BARTLETT, MARIAN STEWART, "*Independent Component Representations for Face Recognition*," Proceedings of the SPIE Symposium on Electronic Imaging: Science and Technology; Conference on Human Vision and Electronic Imaging III, San Jose, CA (January 1998), pp. 528-539.	
KH	I	BARTLETT, MARIAN STEWART et al., "*Viewpoint Invariant Face Recognition Using Independent Component Analysis and Attractor Networks*," Advances in Neural Information Processing Systems (1997), Vol. 9 pp. 817-823.	

Examiner Signature		Date Considered	2/7/2007

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1]Applicant's unique citation designation number (optional). [2]See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3]Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4]For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5]Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6]Applicant is to place a check mark here if English language Translation is attached.

OCT 3 1 2003
PATENT & TRADEMARK OFFICE

PTO/SB/08A (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known	
Application No.	10/621,872
Filing Date	July 16, 2003
First Named Inventor	Ming-Hsuan Yang
Art Unit	2621
Examiner Name	Unknown
Attorney Docket Number	23085-07128

Sheet 2 of 4

OTHER REFERENCES – NON-PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T[6]
KT	J	BAUDAT, G. et al, "*Generalized Discriminant Analysis Using a Kernel Approach*," Neural Computation (2000), Vol. 12, pp. 2385-2404.	
KT	K	BELHUMEUR, PETER N. et al., "*Eigenfaces vs. Fisherfaces: Recognition Using Class Specific Linear Projection*," IEEE Transactions on Pattern Analysis and Machine Intelligence (July 1997), Vol. 19, No. 7, pp. 711-720.	
KT	L	BELL, ANTHONY J. et al., "*An Information-Maximisation Approach to Blind Separation and Blind Deconvolution*," Neural Computation (1995), Vol.7, No. 6, pp. 1004-1034.	
KT	M	BISHOP, CHRISTOPHER M. et al., "*Non-linear Bayesian Image Modelling*," Proceedings of the Sixth European Conference on Computer Vision (2000), Vol. 1, pp 3-17.	
KT	N	FREY, BRENDAN J. et al., "*Mixtures of Local Linear Subspaces for Face Recognition*," Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (June 1998), pp. 32-37.	
KT	O	HYVÄRINEN, AAPO et al., "*A Fast Fixed-Point Algorithm for Independent Component Analysis*," Neural Computation (1997), Vol. 9, No. 7, pp. 1483-1492.	
KT	P	LI, YONGMIN et al., "*Dynamic Face Recognition Using Identity Surfaces*" [online], [retrieved on March 11, 2002]. Retrieved from the Internet: <URL: http://www.dai.ed.ac.uk/CVonline/LOCAL_COPIES/LI1/idsurf>.	
KT	Q	LI, YONGMIN et al., "*Extracting Discriminant Features of Faces Using Kernel Discriminant Analysis*," [online], [retrieved on March 11, 2002]. Retrieved from the Internet: <URL: http://www.dcs.qmul.ac.uk/~yongmin/kda/index.html>.	
KT	R	LIU, CHENGJIN et al., "*Evolutionary Pursuit and Its Application to Face Recognition*," IEEE Transactions of Pattern Analysis and Machine Intelligence (June 2000), Vol. 22, No. 6, pp. 570-582.	
KT	S	MARTINEZ, ALEIX M. et al., "*PCA versus LDA*," IEEE Transactions on Pattern Analysis and Machine Intelligence (February 2001), Vol. 23, No. 2, pp. 228-233.	
KT	T	MIKA, SEBASTIAN et al., "*A Mathematical Programming Approach to the Kernel Fisher Algorithm*," Advances in Neural Information Processing Systems (2001), Vol. 13, pp. 591-597.	
KT	U	MIKA, SEBASTIAN et al., "*Fisher Discriminant Analysis With Kernels*," Proceedings of IEEE Neural Networks for Signal Processing IX (June 1999), pp 41-48.	

Examiner Signature		Date Considered	2-7-2007

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1]Applicant's unique citation designation number (optional). [2]See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3]Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4]For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5]Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6]Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08A (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

U.S. PATENT AND TRADEMARK OFFICE
OCT 31 2003
PATENT & TRADEMARK OFFICE

Sheet 3 of 4

	Complete if Known
Application No.	10/621,872
Filing Date	July 16, 2003
First Named Inventor	Ming-Hsuan Yang
Art Unit	2621
Examiner Name	Unknown
Attorney Docket Number	23085-07128

OTHER REFERENCES – NON-PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T[6]
KY	V	MIKA, SEBASTIAN et al., "*Invariant Feature Extraction and Classification in Kernel Spaces*," Advances in Neural Information Processing Systems (2000), Vol. 12, pp. 526-532.	
KY	W	MOGHADDAM, BABACK, "*Principal Manifolds and Bayesian Subspaces for Visual Recognition*," Proceedings of the Seventh IEEE International Conference on Computer Vision (1999), pp. 1131-1136.	
KY	X	MOGHADDAM, BABACK, "*Probabilistic Visual Learning for Object Representation*," IEEE Transactions on Pattern Analysis and Machine Intelligence (July 1997), Vol. 19, No. 7, pp. 696-710.	
KY	Y	PHILLIPS, P. JONATHAN, "*Support Vector Machines Applied to Face Recognition*," Advances in Neural Information Processing Systems (1998), Vol. 11, pp. 803-809.	
KY	Z	PHILLIPS, P. JONATHAN, "*The FERET Evaluation Methodology for Face-Recognition* Algorithms," IEEE Transactions on Pattern Analysis and Machine Intelligence (October 2000), Vol. 22, No. 10, pp. 1090-1104.	
KY	AA	PLATT, JOHN C. et al., "*Large Margin DAGs for Multiclass Classification*," Advances in Neural Information Processing Systems (2000), Vol. 12, pp. 547-553.	
KY	BB	ROTH, VOLKER et al., "*Nonlinear Discriminant Analysis Using Kernel Functions*," Advances in Neural Information Processing Systems (2000), Vol. 12, pp. 568-574.	
KY	CC	ROWEIS, SAM T. et al., "*Nonlinear Dimensionality Reduction by Locally Linear Embedding*," Science (December 22, 2000), Vol. 290, No. 5500, pp. 2323-2326.	
KY	DD	SCHÖLKOPF, BERNHARD et al., "*Input Space Versus Feature Space in Kernel-Based Methods*," IEEE Transactions on Neural Networks (September 1999), Vol. 10, No. 5, pp. 1000-1017.	
KY	EE	SCHÖLKOPF, BERNHARD et al., "*Kernel Principal Component Analysis*," Advances in Kernel Methods – Support Vector Learning, MIT Press (1999), pp. 327-352.	
KY	FF	SCHÖLKOPF, BERNHARD et al., "*Nonlinear Component Analysis As A Kernel Eigenvalue Problem,*" Neural Computation *(1998), Vol. 10, pp. 1299-1319.*	
KY	GG	SWETS, DANIEL L. et al., "*Hierarchical Disciminant Analysis for Image Retrieval*," IEEE Transactions on Pattern Analysis and Machine Intelligence (May 1999), Vol. 21, No. 5, pp. 386-401.	

Examiner Signature		Date Considered	2/7/2007

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.
Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1]Applicant's unique citation designation number (optional). [2]See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3]Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4]For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5]Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6]Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08A (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

OCT 31 2003
PATENT & TRADEMARK OFFICE

Sheet 4 of 4

Complete if Known	
Application No.	10/621,872
Filing Date	July 16, 2003
First Named Inventor	Ming-Hsuan Yang
Art Unit	2621
Examiner Name	Unknown
Attorney Docket Number	23085-07128

OTHER REFERENCES – NON-PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T[6]
KY	HH	TEH, YEE WHYE et al., "*Rate-coded Restricted Boltzmann Machines for Face Recognition*," Advances in Neural Information Processing Systems (2001), Vol. 13, pp. 908-914.	
KY	II	TENENBAUM, JOSHUA B. et al., "*A Global Geometric Framework for Nonlinear Dimensionality Reduction*," Science (December 22, 2000), Vol. 290, No. 5500, pp 2319-2323.	
KY	JJ	WESTON, J. et al., "*Feature Selection for SVMs*," Proceedings of the Advances in Neural Information Processing Systems (2001), Vol. 13, pp. 668-674.	
KY	KK	YANG, MING-HSUAN et al., "*Face Recognition Using Kernel Eigenfaces*," Proceedings of the IEEE International Conference on Image Processing (September 2000), Vancouver, Canada, Vol. 1, pp. 37-40.	
KY	LL	ZHAO, W. et al., "*Discriminant Analysis of Principal Components for Face Recognition*," Third International Conference on Automatic Face and Gesture Recognition (1998), pp. 336-341.	
KY	MM	International Search Report dated March 4, 2003 for International Application No. PCT/JP02/12649, filed on December 3, 2002.	
KY	NN	International Search Report dated August 26, 2003 for International Application No. PCT/JP03/09534 filed on July 28, 2003.	
KY	OO	Written Opinion from International Preliminary Examining Authority dated August 26, 2003 for International Application No. PCT/JP02/12649 filed on December 3, 2002.	

Examiner Signature		Date Considered	2/7/2007

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.
Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1]Applicant's unique citation designation number (optional). [2]See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3]Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4]For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5]Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6]Applicant is to place a check mark here if English language Translation is attached.